

REMARKS

Claims 1, 2, 4 – 7, 10, 11, 13 – 21, 23 – 28 and 30 remain in the present application.

Drawing Objections

The present Office Action Objects to Figures 2 – 4 and alleges the figures should be designated by a legend “Prior Art”. Applicant respectfully asserts that prior art does not show linear predictive terms are discarded and error terms are kept.

103 Rejections

Claims 11, 13 - 18 and 26 are rejected in the above referenced Office Action, under 35 U.S.C. 103 (a) as being unpatentable over Lee et al. (US patent # 5,687,191 in view of Keiler et al. In “Efficient Linear Prediction for Digital Effects”, Proceedings of the COST G-6 Conference on Digital Audio Effects (DAFX-00), Verona, Italy, December 7 – 9, 2000 (herein after Keiler et al.). Applicant respectfully asserts that the present claimed invention is neither shown nor suggested by the Lee et al. reference or the Keiler et al reference, alone or together in combination.

With respect to Claim 11, the present Office Action alleges the Lee et al. reference teaches a linear predictive coding filter for filtering out period signals in a spread spectrum system. To the extent the Lee et al. reference may mention a model based coding method is linear predictive coding where the filter is defined by filter

coefficients and a gain parameter [Col. 3, lines 15 – 20] and a data carrier sequence may comprise a spread spectrum PN sequence [Col. 5, lines 25 –30], Applicant respectfully asserts the Lee et al. reference does not teach a linear predictive coding filter for filtering out periodic or quasi-periodic signals in a spread spectrum system as claimed in the present Application.

The present Office Action acknowledges that the Lee et al. reference does not teach a linear predictive coding gradient adaptive lattice that filters out periodic or quasi-periodic signals corresponding to predictive coefficients and said linear predictive coding filter outputs error information which is then used for signal processing purpose. Applicant respectfully asserts the Keiler et al. reference does overcome these and other shortcomings of the Lee et al. reference. Applicant respectfully draws the Examiner's attention to page 19 second paragraph of the present Application explaining that in the present invention the error terms are kept and the linear terms are discarded in contrast to the Keiler et al. reference (also mentioned on page 10 second paragraph of the present Application).

With respect to Claim 13, the present Office Action appears to allege the present claimed invention would have been obvious. Applicant respectfully asserts the present claimed invention would not have been obvious.

With respect to Claim 14, the present Office Action acknowledges the cited references do not teach a frequency hopping spread spectrum system. Applicant respectfully asserts it is not obvious that the spread spectrum system includes a frequency hopping spread spectrum system as claimed in the present application.

With respect to Claim 15, the present Office Action rejects Claim 15 under the analysis of Claim 11 and alleges the Keiler et al. reference discloses linear predictive terms are discarded. Applicant respectfully reiterates arguments presented above with respect to Claim 11 and asserts the Keiler et al. reference does not teach linear predictive terms are discarded.

With respect to Claim 16, the present Office Action appears to allege it would be obvious to filter out periodic signal in compliance with IEEE 802.11(b). Applicant respectfully asserts it is not obvious that the filter is used to filter out periodic or quasi-periodic signals in compliance with IEEE 802.11(b) as claimed in the present Application.

With respect to Claim 17, the present Office Action acknowledges that the cited references do not teach the filter is in compliance with Bluetooth. Applicant respectfully asserts it is not obvious that filter is used to filter out periodic or quasi-periodic signals in compliance with Bluetooth as claimed in the present application.

With respect to Claim 18, the present Office Action alleges the instant claimed invention would have been obvious. Applicant respectfully asserts the instant claimed invention would not have been obvious.

With respect to Claim 26, the present Office Action alleges the Lee et al. reference discloses a spread spectrum antenna and a teaches linear predictive coding filter for filtering out period signals in a spread spectrum system. To the extent the Lee et al.

reference may mention a model based coding method is linear predictive coding where the filter is defined by filter coefficients and a gain parameter [Col. 3, lines 15 – 20] and a data carrier sequence may comprise a spread spectrum PN sequence [Col. 5, lines 25 – 30], Applicant respectfully asserts the Lee et al. reference does not teach a linear predictive coding filter for filtering out periodic or quasi-periodic signals in a spread spectrum system as claimed in the present Application).

The present Office Action acknowledges that the Lee et al. reference does not teach a linear predictive coding gradient adaptive lattice that filters out periodic or quasi-periodic signals corresponding to predictive coefficients and said linear predictive coding filter outputs error information which is then used for signal processing purpose. Applicant respectfully asserts the Keiler et al. reference does overcome these and other shortcomings of the Lee et al. reference. Applicant respectfully draws the Examiner's attention to page 19 second paragraph of the present Application explaining that in the present invention the error terms are kept and the linear terms are discarded in contrast to the Keiler et al. reference (also mentioned on page 10 second paragraph of the present Application).

Claim 19 is rejected in the above referenced Office Action, under 35 U.S.C. 103 (a) as being unpatentable over Lee et al. (US patent # 5,687,191 in view of Keiler et al. In "Efficient Llinear Prediction for Digital Effects", Proceedings of the COST G-6 Conference on Digital Audio Effects (DAFX-00), Verona, Italy, December 7 – 9, 2000 (herein after Keiler et al.) and further in view of Miyake et al. (US Patent #6,678,341). Applicant respectfully asserts that the present claimed invention is neither shown nor

suggested by the Lee et al. reference, the Keiler et al. reference, or the Miyake et al. reference, alone or together in combination.

The present Office Action indicates Claim 19 is rejected under rationale similar to the rejection of Claim 11. Applicant respectfully reasserts the arguments presented above with respect to Claim 11 and asserts the cited references do not teach the invention as claimed in the present Application. The present Office Action acknowledges the Lee et al. reference and the Keiler et al. reference do not teach a filter is used in a peer-to-peer system. Applicant respectfully asserts the Miyake et al. reference does not overcome these and other shortcomings of the Lee et al. and Keiler et al. reference. To the extent the Miyake et al. reference may mention a band pass filter and peer-to-peer communications [Col. 6 lines 25 – 41], Applicant respectfully asserts the Miyake et al. does not teach and it is not obvious that a linear predictive coding filter is used in a wireless peer-to-peer system as claimed in the present application.

Allowed Subject Matter

The present Office Action indicates Claims 1, 2, 4-7, 11, 13-21, 23-28 and 30 are allowed. Applicant thanks the Examiner for indicating allowed subject matter.

Conclusion

In light of the remarks above, Applicant respectfully requests allowance of the remaining Claims. The examiner is urged to contact Applicant's undersigned

representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

WAGNER, MURABITO & HAO

Date: 10/5/, 2005

A handwritten signature in cursive script, appearing to read "John F. Ryan", is written over a horizontal line.

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